Staff Summary of the July 15, 2004, Meeting of the California Climate Change Advisory Committee

The first quarterly meeting of the California Energy Commission's California Climate Change Advisory Committee (Advisory Committee) was conducted on July 15, 2004, in Sacramento. The Advisory Committee is comprised of 17 representatives from government, industry, utilities, forestry, agriculture, local government, business and environmental groups. California Energy Commissioner James Boyd chaired the meeting and outlined expectations for the Advisory Committee, including a request to develop a report recommending climate change policy and program actions for the California Governor and Legislature.

I. Issues and Opportunities

Advisory Committee members identified numerous climate change issues and potential opportunities to reduce greenhouse gas emissions in California. These issues and opportunities include:

1. Agriculture. Air quality regulations have heightened the awareness of California's agriculture industry about the benefit of using clean fuels and energy efficient technologies in their operations. Opportunities to reduce criteria pollutants and greenhouse gas emissions include methane recovery in dairies and feedlots, energy efficient water pumping and exploring carbon sequestration options.
2. Forestry. Improved forest management practices can reduce wildfires and carbon emissions. For example, forest companies could incorporate conservation and best management practices in their operations in order to protect and preserve native forests. In addition, reporting and verifying greenhouse gas emissions from forestry projects and carbon stores is an important first step in realizing real emission reductions from prudent forest practices.
3. Transportation. Advisory Committee members called for action to address transportation emission problems and to reduce our reliance on petroleum fuels. Opportunities exist to shift to electric/gasoline hybrids, alternative fuels and multimodal systems, but are dependent on market drivers.
4. Electricity. Economic incentives, building efficiency and appliance standards and the renewable energy portfolio standard have stimulated the widespread use of renewable energy and energy efficiency technologies. The Advisory Committee encourages an acceleration of renewable energy and energy efficiency options.
5. Local Governments. Methane recovery in landfills is an option that cities and counties should pursue to reduce greenhouse gas emissions. In addition, state, regional and local governments should incorporate climate change considerations in their local land use plans and practices. For example, regional and local plans and incentive programs, based on the State's General Plan Guidelines developed by the Office of Planning and Research, are one way to accomplish this objective.
6. Business/Financial. The Advisory Committee suggests engaging the financial community to stimulate financial investment in projects that reduce greenhouse

gas emissions. In addition, financial experts have insights into the financial risks faced by industries that do not address their greenhouse gas emissions. Many corporations have begun to establish internal greenhouse gas emission reduction goals. Markets can work to solve climate change problems and some Advisory Committee members recommended creating an emission credit trading system.

7. Energy Research, Development, Demonstration and Commercialization. Advisory Committee members suggested that climate change improvements can occur by stimulating the introduction of advanced, clean energy technologies into the marketplace. Committee members identified a need for research tasks to improve climate change monitoring tools, assess statewide impacts and explore mitigation and adaptation actions to address climate change impacts. Promotion of energy technology exports to other countries would also reduce greenhouse gas emissions.

II. Strategies and Approaches

Advisory Committee members offered insights on strategies and approaches to analyze issues, to propose recommendations and to implement future actions. These strategies and approaches include:

1. Develop an overarching strategy as a "big picture" context.
2. Develop sector-specific greenhouse gas emission reduction goals with consequences for not meeting them. A preference is that a California system can influence the development of a national goal and a national cap-and-trade system to implement goals.
3. Determine what the group can do to influence national action, such as establishing regional and state climate change goals and forming partnerships to move toward national cap-and-trade programs.
4. Make a case for consensus action in the context of the consequences of inaction. Some members did not agree with a need for consensus decisions on all topics.
5. Prioritize spending of federal, state and local government funds to focus on key climate change objectives. Do not dilute efforts.
6. Take a balanced approach to include a variety of viewpoints and engage bi-partisan participation.
7. Create additional political momentum and provide leadership direction for the state to follow. Establish California as a "bellweather" example for national and international actions.
8. Articulate a vision of the problems, likely solutions and the long-term process to fulfill objectives.
9. Respond to Governor Schwarzenegger's call for action-oriented solutions to state problems.
10. Consider the political feasibility of any recommendation.
11. Focus on market approaches as opposed to government edicts, but establish goals to initiate action and measure results.

12. Identify practical roles for various parties to take to achieve greenhouse gas emission reductions at the local or project levels.
13. Take a philosophical “steer” not “row” approach that is flexible, informal and maximizes external input.
14. Promote corporate governance – companies need to disclose liabilities of climate change impacts and emission reduction actions not taken.

III. Areas of Analysis and Information Gathering

The Advisory Committee members identified a need for analysis, information gathering and education efforts to address the following topics:

1. Quantify the benefits (economic and financial values) of greenhouse gas emission reductions and mitigation measures, including probabilities of economic losses from inaction or business-as-usual climate policy.
2. Track “real world” problems and determine how to assign probabilities of climate impacts. Conduct research on regional climate change scenarios.
3. Evaluate lifecycle costs and benefits of greenhouse gas emission sources, and assess the technology and fuel options to incorporate environmental and other social costs and benefits in economic decisions.
4. Re-examine forecasts of coal-fired power plant contributions to new electricity capacity in the western United States and evaluate the implications for climate change.
5. Evaluate emissions from wildfires.
6. Look beyond fire emissions: include tree loss and drought impacts.
7. Use Intergovernmental Panel on Climate Change (IPCC) assessments in analytical work.
8. Highlight obvious conclusions that financial/human inaction, increases the future risk of even greater damages to the economy, environment and public health.
9. Evaluate the climate altering impacts of “black carbon” (soot).
10. Assess the economic costs of government actions to address climate change problems, and compare these costs against the potential consequences and risks of government inaction.
11. Evaluate the consequences of modest temperature and precipitation changes on the environment and economy.
12. Analyze both market-based solutions and government mandated solutions to achieve greenhouse gas emission reduction goals.
13. Compare the impact and effectiveness of greenhouse gas emission reduction goals developed for California versus goals set at a regional level.
14. Identify bioenergy opportunities.
15. Examine “leakage” of greenhouse gas emission reductions across state borders.

IV. Initiatives

The Advisory Committee members proposed several initiatives and suggested additional work is needed to flesh out concepts and examine potential policy benefits in California. These initiatives include:

1. Engage local governments, regional planning agencies and corporate CEO's to identify transportation solutions.
2. Enhance the initial success of the California Climate Action Registry; encourage greater participation in the Registry's efforts to identify emission sources and develop entity-wide emission inventories.
3. Establish greenhouse gas emission reduction goals, provide incentives and let the markets work.
4. Establish a mechanism to create revenue for clean transportation fuels and technology research, development and policy analysis focused on California's unique transportation systems.
5. Explore allocating revenue for clean transportation fuels/technologies from anticipated UNOCAL patent infringement refunds.
6. Establish a cap and trade system: formulate a plan for California to implement a cap and trade system as a model and allow other states to opt into the system.
7. Encourage state pension fund managers to increase investment in companies or projects that produce greenhouse gas emission reductions.
8. Use state facilities and fleets as demonstration models to implement greenhouse gas emission reduction programs.
9. Increase "Carl Moyer" type funding to shift from diesel fuel to cleaner options.
10. Remove institutional barriers farmers face to pay for electricity standby charges and redesign electricity tariffs to allow "pay-as-you-go" uses.
11. Establish a new "public goods charge" to adequately fund new agricultural efficiency and methane recovery projects. Increase the current "public goods charge" for renewable energy and energy efficiency projects.
12. Identify measures to achieve local co-benefits in addition to greenhouse gas emission reductions, such as criteria pollutant emission reduction credits and other supplemental income streams.
13. Continue to influence California Public Utilities Commission decisions on electricity resource procurement to reward entities that significantly reduce greenhouse gas emissions.
14. Develop demonstration projects in several sectors of the economy to showcase real projects. Provide a distinction between projects that <u>reduce</u> emissions and projects that <u>eliminate or avoid</u> new sources of emissions.
15. Establish sector-specific targets for greenhouse gas emission reductions.
16. Examine the benefits and costs of a "carbon fee" to promote market behaviors that reduce climate impacts.

V. <u>Future Meeting Agendas and Logistics</u>

The Advisory Committee members discussed future meetings, logistics, agenda topics and Advisory Committee operations, including the following items:

1. To address the topics raised at the first meeting, the Advisory Committee will need to confer more frequently than four times during the first year.
2. The Advisory Committee members are open to conference call meetings and teleconferencing to ensure that topics are addressed adequately.
3. The Advisory Committee is relying on the California Energy Commission staff to prepare background information.
4. The Advisory Committee members expressed concern about adequate resources dedicated by the State to support work at the Energy Commission.
5. Some Advisory Committee members suggested a systematic approach to addressing topics at each meeting or conference call and recommended focusing face-to-face meetings on (1) opportunities (e.g., cap and trade, agricultural projects), (2) potential solutions, and (3) implementation of strategies or mandates.
6. Advisory Committee members expressed interest in conducting future meetings in the San Francisco Bay area and Los Angeles.